

Docket No.: 104917.127

1633
JAN 11 2001
PATENT/OFFICIAL

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Leiden et al. :

Serial No. 09/473,830

Filed: December 28, 1999

For: EFFICIENT AND STABLE IN VIVO
GENE TRANSFER TO CARDIOMYOCYTES
USING RECOMBINANT ADENO-
ASSOCIATED VIRUS VECTORS



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Group Art Unit: 1633

Examiner: Y. Connell

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for
Patents and Trademarks
Washington, D. C. 20231

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, and in conformance with the procedures of 37 C.F.R. §§ 1.97 and 1.98, attorneys for Applicants hereby bring the attached references to the attention of the Examiner. The references are listed on the attached form PTO-1449. It is respectfully requested that the information be expressly considered during prosecution of this application and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

A copy of each patent, publication or other information listed on form PTO-1449

is enclosed.

01/09/2001 JADDO1 00000089 080219 09473830

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This Information Disclosure Statement is being submitted after issuance of the first Office Action. The Commissioner is hereby authorized to charge the fee of \$240.00 and any additional fees which may be required for this submission, or credit any overpayment to **Deposit Account No. 08-0219**. A duplicate copy of this sheet is enclosed

Respectfully submitted,

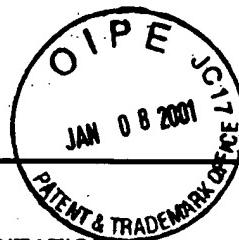
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SHEET 1 OF 3

#7

<p>Subst. Form PTO-1449</p> <p>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</p> <p><i>(Use several sheets if necessary)</i></p>	 <p>Docket Number (Optional) 104914.127</p>	<p>Application Number 09/473,830</p>
<p>Applicant Leiden, et al.</p>		
<p>Filing Date December 28, 1999</p>	<p>Group Art Unit 1633</p>	

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U. S. Patent Documents

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLAS S	Translation	
						YES	NO
CEO 02/16/01	WO 97/26337 ✓	7/24/97	PCT				
	WO 97/32990 ✓	9/12/97	PCT				
	WO 98/46728 ✓	10/22/98	PCT				
↓	WO 99/07833 ✓	2/18/99	PCT				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

CED 02/09/04  A  A  A 	<p>Alexander, Ian, et al., "Transfer of Contaminants in Adeno-Associated Virus Vector Stocks Can Mimic Transduction and Lead to Artifactual Results," <i>Hum. Gene Ther.</i> 8: 1911-1920 (1997)</p> <p>Gnatenko, Dmitri, et al. "Characterization of Recombinant Adeno-Associated Virus-2 as a Vehicle for Gene Delivery and Expression into Vascular Cells," <i>J. Invest. Med.</i> 45: 87-98 (1997)</p> <p>Kaplitt, Michael G., et al., "Long-Term Gene Transfer in Porcine Myocardium After Coronary Infusion of an Adeno-Associated Virus Vector," <i>Ann. Thorac. Surg.</i> 62: 1669-1676 (1996)</p> <p>Kessler, Paul D., et al., "Sodium Butyrate Greatly Enhances the Efficiency of Viral Transduction in Adult Ventricular Cardiomyocytes by Adeno-associated Viral Vectors," <i>Circulation, Supp.</i> 1 92: I-296, Abstract 1408 (1995)</p>
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EXAMINER

DATE CONSIDERED

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INFORMATION DISCLOSURE CITATION
IN AN APPLICATION

(Use several sheets if necessary)

Docket Number (Optional)
104914.127

Application Number
09/473,830

Applicant
Leiden, et al.

Filing Date
December 28, 1999

Group Art Unit
1633

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

✓ 01/30/01	A 5	Maeda, Yoshikazu, et al., "Efficient Gene Transfer into Cardiac Myocytes Using Adeno-Associated Virus (AAV) Vectors," J. Mol. Cell. Cardiol. 30: 1341-1348 (1998)
✓	A 6	Phillips, Ian M., et al., "Prolonged Reduction of High Blood Pressure With an In Vivo, Nonpathogenic, Adeno-Associated Viral Vector Delivery of AT ₁ -R mRNA Antisense," Hypertension 29: 374-380 (1997)
✓	A 7	Ping, P., et al. "Altered β-Adrenergic Receptor Signaling In Heart Failure, In Vivo Gene Transfer Via Adeno and Adeno-Associated Virus," Microcirculation, 3: 225-228 (1996)
✓	A 8	Dourtis, A. P., et al., "Cardiac Gene Therapy with Adeno-Associated Virus as a Means of Achieving Graft-specific Immunosuppression," Mod. Pathol. 8: 33A, Abstract 178 (1995)
✓	A 9	Rolling, Fabienne, et al., "AAV as a Viral Vector for Human Gene Therapy," Mol., Biotechnol. 3: 9-15 (1995)
✓	A 10	Kessler, et al., "Gene Delivery To Skeletal Muscle Results In Sustained Expression and Systemic Delivery of A Therapeutic Protein," Proc. Natl. Acad. Sci. USA 93:14087-97 (1996)

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